



### **USAID FIRMS PROJECT**

# **Animal Fattening Project**

Pre-Feasibility Study Report

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### Abstract:

The USAID Pakistan Firms project aims to assist the Khyber Pakhtunkhwa Board of Investment and Trade (KPBOIT) in promoting investment and trade in the province. In an effort to achieve this aim preliminary feasibility studies have been conducted in order to highlight the investment opportunities available for international and domestic investors. The focus of these preliminary feasibility studies has been kept on the high economic growth sectors in KPK.

This report is a part of series of pre-feasibility studies conducted for identified projects. The information used for the preparation of this report has been gathered from various reliable sources including economic and statistical surveys carried out by the government of Pakistan. Competitor's data and industry averages have been used as a basis for the preparation of preliminary financial projections.

This report provides a financial and economic analysis of the opportunities available in the sector and identifies the potential technical strengths and constraints that may be encountered by the investor(s) in undertaking the identified project. It aims to help the reader develop an understanding of the operational aspects of the sector and its growth potential in the country particularly in the Khyber Pakhtunkhwa province. An outline for a business plan has been prepared for the identified project which identifies the operational requirements (equipment, human resource, infrastructure etc.). The analysis is supported by preliminary financial projections for the first ten years of the business.

# Acronyms

KPK Khyber Pakhtunkhwa

SOW Scope of Work
US United States

USAID United States Agency for International Development

GDP Gross Domestic Product

HR Human Resource

IT Information Technology
IRR Internal Rate of return

KIBOR Karachi Inter Bank Offer Rate

KPK Khyber Pakhtunkhwa

KPBOIT Khyber Pakhtunkhwa Board of Investment and Trade

NGO Non-Governmental Organization

NPV Net present Value PKR Pakistani Rupee

ROI Return on Investment

USA United States of America

USAID United States Agency for International Development

USD United States Dollar

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## **Executive Summary**

Chemonics International is implementing the USAID Pakistan Firms Project that works to develop a dynamic internationally competitive business sector to accelerate sales, increase exports, investment, job growth and produce higher value added products and services. Within the business enabling component, the project has initiated an assistance program for the Khyber Pakhtunkhwa Board of Investment and Trade (KPBOIT) to help it meet its mandate promoting investment and trade in the province. The KPBOIT was created with a mandate to advocate specific investment friendly reforms and advise the KP government regarding the provision of adequate infrastructure facilities for making the KP Province business environment more conducive to international investment.

KPBOIT is considering to initiate an animal fattening project to promote commercial animal farming projects. The program is mandated to introduce a transition from subsistence and partially grazed farming to on-stall commercial meat farming and inculcate a meat farming culture.

Livestock occupies a unique position in the national and provincial programs of economic development. It constitutes 55% to the agriculture value added and 11.6% to national GDP. In KP, livestock mainly consists of buffalo, cattle, sheep, goat, mules, asses and poultry. Livestock products including meat, milk, bones, fat, hides and skin are generating significant revenues for investors. Livestock sector has a huge export potential as the International Halal Food Market generates a large demand. KP has the added advantage of having Afghanistan and Central Asian States in the neighborhood which have a large market for Halal Food items of livestock origin.

The proposed locations for the project are around Peshawar near GT. road. Total land area to be provided for the project is estimated at 7 acres.

This pre-feasibility has been based on a series of assumptions with respect to design, size, costs, revenues, returns etc. However, these are indicative only and the investors might require to carry out their own feasibility studies.

The project will be offered to the investor(s) selected through competitive bidding process. Identification of land and obtaining requisite approvals from the provincial government for construction of the proposed program will be the responsibility of KPBOIT. Construction and operations of the project will be managed by the investors. The construction of farm would be subject to pre-conditions with respect to design approval, minimum standards to be followed etc. which will be detailed in the project RFPs to be launched at a later stage.

#### **Results of Financial Pre-Feasibility**

The results of this financial pre-feasibility indicate that development of a hybrid meat farm project (comprising of calves and sheep farms) at a total area of 7 acres, with a total animal capacity of 3,500 (1,000 calves and 2,500 sheep) will be a profitable financial investment.

The results of this financial pre-feasibility indicate that the project is capable of generating following results:

- Equity IRR of 19.03% and
- Project IRR of 18.57%

Following are the key assumptions/considerations for the investors which were used in this prefeasibility and which form basis of projected returns from the project:

- Total project outlay is estimated at PKR 184.7 million, comprising of infrastructure cost of PKR 85.8 million and initial year animal stock and running costs of PKR 98.9 million.
- The project is assumed to be financed through 40% equity and 60% debt. Total equity contribution will be required at PKR 73.9 million.
- The cost of equity has been assumed at 15%, whereas, cost of debt is estimated at KIBOR + 3% (13.5% total).
- The project is expected to be constructed in a time period of one year.
- Cost estimates are based on cost structures in comparable animal fattening farms in the country.

# Project Background & Rationale

#### 1.1 Introduction

Livestock breeding has remained hallmark of South Asian society. Pakistan is blessed with a large population of livestock that is well adapted to the local environment. Being a country that has majority rural population and agriculture-based industry, livestock farming plays a pivotal role in the economy of Pakistan. Livestock production is an integral part of Pakistan's agriculture sector and plays a vital role in national economy.

It is source of milk and meat for daily consumption to the ever-increasing human population, draught power for cropping and rural transport, field-yard-manure for soil fertilization, raw materials for industrial products and hides, skins and wool for earning of valuable foreign exchange.

The Khyber Pakhtunkhwa Board of Investment and Trade (KPBOIT) has conceived an idea to develop animal fattening farm. Land for the project is being identified and will be offered for investment to facilitate investors willing to avail this feasible opportunity.

This study has been prepared to determine the financial feasibility of building and operating animal farm.

#### 1.2 Introduction to KPBOIT

Khyber Pakhtunkhwa Board of Investment and Trade (KPBOIT) is established for the promotion of trade and investment activities in Khyber Pakhtunkhwa (KPK). Government of Khyber Pakhtunkhwa is committed to bring economic prosperity in the Province through industrial and trade development and delegated this role to KPBOIT.

KPBOIT has accepted this challenging task towards achievement of its mission under the leadership of a dynamic Board Members comprising of eminent people of public and private sectors.

High motivation and commitment is there to achieve the vision to flourish the investment and trade in Khyber Pakhtunkhwa making it most favorite investment destination for investors.

Our land is blessed with abundance of natural resources of Oil & Gas, Hydel Power Generation, Tourist Destinations, Mines and Minerals along with Agriculture. The Province is located at an outstanding geographical location.

KPBOIT is striving for exploiting the tremendous potential of the province into reality and is focused on meeting its important objective of facilitating local and foreign investors desirous of benefiting from this huge potential of the KPK. Our aim is creating an attractive business environment through proactive policy advocacy both at the Provincial and Federal level. Another important role of awareness among investors is to the tremendous opportunities available for investment in KPK and therefore facilitating them for undertaking such investment as a joint venture partners.

We also act as a focal point of contact for both foreign and domestic investors providing information and assistance in coordination with other Government Departments and Agencies.

#### KPBOIT's objectives are:

- To flourish and revive the investment climate of Khyber Pakhtunkhwa and to make it a lucrative investment friendly destination.
- To provide one window operation facility to investors by proactively engaging with all stakeholders to ensure successful investments.
- To act as a bridge between investors and all related government and semi Government Departments/Organizations.
- Advise the Provincial Government to create environment for investment through advocacy of specific investment friendly and comprehensive Public Private Partnership policies.

#### 1.3 Overview of Livestock Sector in Pakistan

The agriculture sector continues to be an essential component of Pakistan's economy. Livestock is essential sub-component of our agricultural sector which contributes to more than half of the output of the sector. It has a vital role in ensuring food security, generating overall economic growth, reducing poverty and the transforming towards industrialization.

Increasing population pressure, land fragmentation and changing food habits emphasize to produce more meat and other livestock products.

Currently, meat sector in Pakistan is working on an informal basis from animal rising to meat selling. Majority of the farming is done on subsistence level.

Farmers focus on raising animals for getting meat and milk products mainly for their own consumption and to get cash income through small-scale sales. There are very few progressive farmers, which are running the business of dairy farming in a professional manner. The practice of 'nomadic herding' is common, where people migrate along with their animals from one place to another in search of fodder for their animals. Generally, they rear cattle, sheep, goats, camels and/or yaks for milk, skin, meat and wool.

The current meat production system is both traditional, inefficient and overall in poor state. Calves raising is considered un-economical in view of the high cost of milk and non-availability of milk-replacer. The survived male calf-crop is generally sold to local traders for butchering. No collective commercial set up has yet in operation for protecting this tender crop for upcoming fattening and replacement operation.

Factors hampering smooth growth include limited awareness in the farmers' communities on modern farming practices, lower productivity per capita, limited outreach of governmental resources & development initiatives, lack of integration between livestock value chain & supply chain, and weak farm-to-market linkages

General crop farming has progressed from the 'subsistence level farming' to 'commercial farming because of research, extension focus and 'market pull factors'. Whereas the livestock farming has remained least commercialized and survives under subsistence farming conditions.

The socio-economic significance of livestock sector in Pakistan cannot be ignored. At present, as per economic survey of Pakistan 2013-14; livestock is contributing about 55.4% to the agricultural sector and 11.9% to the GDP. It also plays an important role in the rural economy as supplementing family incomes and generating gainful employment in the rural population, particularly among the landless laborers, small and marginal farmers.

### 1.4 Project Location

KPK has availability of vegetation/fodder-crops in abundant agricultural lands. There exist the areas which have temperate weather conditions and receive more than 1000 mm rainfall annually, nicely spread over the year which provide abundant green vegetation for cutting. The province has vast ranges situated on the riverbed, providing sufficient vegetation during spring, summer and fall months. All these factors can contribute towards a successful and profitable animal-fattening project.

The project can be initiated in areas near the GT. road around Peshawar city, which will save carriage cost and ensure accessibility to a larger market. The development of urban or periurban commercial animal-fattening farms is something new in livestock production. Currently meat is brought into these markets from Punjab especially the buffalo-beef because majority people in Punjab do not relish from this and slaughtering animals are brought to KPK.

### 1.5 Market Analysis

In the current market structure, animal traders purchase animals from the rural areas and sell them to the animal markets in the urban areas. Butchers purchase these animals from animal markets and slaughter them in the slaughterhouses. Butchers act as meat traders and dominate the meat market both in rural and urban areas.

There is a huge shortage of slaughter animals for meat supply. This shortage is being observed through meat-less days. If the calf-fattening projects are carried out in the country then the domestic demand of beef could be fulfilled.

The animal growth cycle needs a certain period to fill the gap made by slaughtered animals but rapid increase in daily use, change in consumption patterns, use of more meat in food table and economic up lift has increased the demand by many folds resulting in slaughtering of premature animals, poor carcass quality and quantity wise and increase in price. If this practice continued, there would be a huge gap between supply and demand, forcing the import of meat at large scale.

The per capita consumption indicates a growing demand of meat in the years to come. The demand increases especially before occasions like Eid-ul-Fitr and Eid-ul-Azha. That is why the animals in such occasions are sold at a bit higher prices as compared to other days. The proposed business can be started before these occasions or any time throughout the year.

Despite an increase in meat production, the prices have moved upward abnormally. The recent increase in meat prices is attributed to the export of live animals or meat to the Middle East and Afghanistan.

Pakistan is geographically located close to the Middle East and South-East Asia. Both of these regions are deficient in livestock products and depend upon import from other countries. The exports of livestock such as cow, buffalo, sheep and goat are finding their way to the Gulf States & Iran where there is a shortage of good quality meat, hence fetches a high price.

The export of meat from Pakistan is relatively a new segment of country's trade, as the real commercial level export started in not before that. Thus, the export of meat and meat preparation is not so high; but the export growth rate is quite encouraging.

Despite the annual growth in production, there has been hike in meat price particularly due to illegal smuggling of animals to Afghanistan and also due to the fact that the growth rate of production is less than the increase in demand in the domestic market.

### 1.6 Conclusion

The results of pre-feasibility study indicate that there is considerable potential for investment in the animal fattening project. The project can benefit from high demand in both local as well as international markets.

#### 1.7 KPBOIT Assistance

In accordance with the objectives of the KPBOIT, it will serve as one window facilitation center for the investors with respect to the proposed project. KPBOIT will assist the investors, in relation to the proposed project, through:

- Obtaining requisite approvals from the provincial government;
- Provision of land for the project on lease basis;
- Provision of pre-feasibility study for the project; and
- Assistance in arranging utilities etc

# 2. Financial Pre-Feasibility

### 2.1 Project Design Assumptions

Calf fattening is an agro-based project. The calves, preferably males, 8-9 months of age are fed on concentrated feed and fodder produced from the agricultural land. Balanced feed is given to calves for a period of 180 days to get higher weight gain. If these calves are fed properly on the formulated fattening feed, their weight can be raised up to 180-200 kg during the fattening period. The daily weight gain of fattened calves varies between 600-800 grams depending on the quality of feed given to them. There is a shortage of beef in the country. This shortage is being observed through meat-less days. If the calf-fattening projects are carried out in the country then the domestic demand of beef could be fulfilled.

The thrust in calf fattening farm is on the increased use of capital and management. Successful farming harnesses all available resources into productive and profitable unit. Calf fattening is highly complex as it includes farm management, feeding, housing, disease control and hygienic production of milk on farm. The judicial use of means and resources to achieve clearly defined goals is the key success factor i.e. the art of maximization and optimal utilization of resources and means for maximizing productivity and profits. Feeding meat animals on nutritious compound feed along with green fodder can be adopted. Other farm management practices include comfortable and ventilated barns, drinking water and feed according to the requirements.

Too many young male calves are slaughtered quite young due to high cost of milk required to feed them. Those left are generally underfed and stunted thus unable to achieve the normal growth. A suitable plan could provide animals of 150-180 kgs of weight, which could be raised to the desired market demand.

Sheep is a small animal, having value for mutton and wool production. It has a good fertility rate and produces a lot of offspring under good husbandry management. Sheep farming in Pakistan is still traditional and intervention along modern lines is needed to fulfill the increasing demand for quality wool and mutton. In KPK region, mutton is highly appreciated and liked by people and consumers are paying high prices for it. Hazara and Malakand divisions of the Province are well known for trans-human livestock production, specially the wool and mutton animals.

Animals selected for fattening should be from six to eight months of age. At this age the animal is weaned and starts eating green fodder and grass. As compared to grown up sheep the daily weight-gain capacity is also better at this age. Weight and age of all the selected animals should also be similar otherwise the larger and older animals would not let the smaller animals to eat feed according to their requirement. Selected animals should not be sick, weak or with physical disabilities.

### 2.2 Project Setup Costs

The total project outlay has been estimated at PKR 184.7 million. The costs are estimated on the basis of farm to be established at a total area of 7 acres and capable of housing 1,000 calves and 2,500 sheep. The table below presents breaks down of project set up costs.

**Table 1 Project Set Up Costs** 

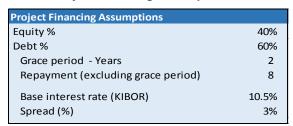
Project Capital Cost	PKR M
Land 7 acres @ PKR 1.5 million per acre	10,500,000
Building and sheds	
Sheds for animals (20 K SFT @ PKR 800 per SFT)	16,000,000
Open Paddock for Calves (30 K SFT @ PKR 100 per SFT)	3,000,000
Stores (Feed & machine) (10 K SFT @ PKR 1,500 per SFT)	15,000,000
Staff housing area (5 K SFT @ PKR 2,000 per SFT)	10,000,000
Water ponds (5 K SFT @ PKR 1,500 per SFT)	7,500,000
Farm Machinery	
Chopper (PKR 20 K x 20)	400,000
Water pump (PKR 15K x 10)	150,000
Tube Well (PKR 450 K x 3)	1,350,000
Weighing Scale (PKR 75K x 6)	450,000
Miscellaneous farm utensils	500,000
Furniture and fixture	2,000,000
Vehicles	4,000,000
Interest during construction	14,959,440
Total Capital Cost	85,809,440

In addition to the above mentioned capital costs, additional set up costs of PKR 98.8 million will also be required for procurement of animal stock and operational expenses of the farm in the first year. These estimates are based on procurement of 1,000 calves at per unit price of PKR 17,500 and 2,500 sheep at a per unit rate of PKR 4,400. Total cost for procurement of stock at the start of the farm operations is estimated at PKR 63.5 million. In addition, PKR 35.3 million has been estimated for initial year operational requirements including feed costs, vaccination costs, electricity costs, utilities, and salaries etc.

For the purpose of this financial pre-feasibility, the debt to equity ratio has been assumed as 60% debt and 40% equity. At these levels, the investors will be required to make equity contribution of PKR 73.9 million.

Debt financing of up to PKR 102.2 million will be required during the construction period of one year of the project. Financing cost has been estimated at KIBOR (currently 10.5%) + 3%.

**Table 2 Project Financing Assumptions** 



### 2.3 Operating Assumptions

Assumptions relating to operating costs and revenues are based on operation of animal fattening farm with capacity of 3,500 animals per cycle. The following table summarizes key operational assumptions applied in the financial pre-feasibility study:

**Table 3 Operating Assumptions** 

Operating assumptions	Units
Number of calves (per cycle)	1,000
Number of sheep/ goats (per cycle)	2,500
Average weight of baby calf	85
Average per kg price of baby calf	206
Average weight of baby sheep/ goat	11
Average per kg price of baby sheep/ goat	400
Feed Cost per calf (per annum)	15,000
Feed Cost per sheep/ goat (per annum)	3,500
Mortality rate - Calves	3%
Mortality rate - Sheep/ goats	4%
Vaccination cost - PKR per calf	950
Vaccination cost - PKR per goat	550
HR requirements	
Manager and supervisors	2
Farm Labor	20
Manager and vet supervisors - annual salary cost	1,200,000
Farm Labor - annual salary cost	3,600,000
Annual escalation in costs %	8%
Repair & maintenance (annual cost)	1,000,000
Electricity cost (average per animal) - PKR	450
Other utilities (average per animal) - PKR	50
Fattening cycles (calf) - days	120
Fattening cycles (sheep/ goat ) - days	360

The fattening cycles for calves and sheep are estimated at six months and twelve months respectively. Accordingly, total annual output from the project is estimated at 17,500 units. Selling prices of calves and sheep are estimated at PKR 45,500 and PKR 13,500 respectively.

Administration costs are estimated at PKR 1 million per annum.

Annual escalation in costs and revenues is estimated at 8%.

The table below summarizes working capital assumptions applied in the financial pre-feasibility:

**Table 4 Working Capital Assumptions** 

Working capital assumptions	
Feed (inventory in months)	1
Development assets (months)	12
Vaccines (inventory in months)	2
Trade debts (as a % of sales)	5%
Trade creditors (as a % of costs)	5%

### 2.4 Project Returns

Based on cash flow projections prepared after taking into consideration project set up costs and operating results, the project is expected to generate IRR of 19.03% for the equity investor. Please refer charts on the following pages for profitability analysis.

Project IRR	18.57%
Project NPV @15%	23,153,689
Equity IRR	19.03%
Equity NPV @15%	14,851,554

# 3. Appendices

### **Appendix -1 Projected Balance Sheet**

ANIMAL FATTENING
PROJECTED BALANCE SHEET

Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
85,809,440	80,394,081	74,978,722	69,563,363	64,148,004	58,732,645
					, ,
-	5,598,000	6,045,840	6,529,507	7,051,868	7,616,017
-	8,899,470	9,611,428	10,380,342	11,210,769	12,107,631
63,500,000	68,580,000	74,066,400	79,991,712	86,391,049	93,302,333
-	5,784,975	16,232,215	28,698,945	43,330,892	60,283,305
63,500,000	88,862,445	105,955,883	125,600,506	147,984,578	173,309,286
149,309,440	169,256,525	180,934,605	195,163,869	212,132,582	232,041,931
					_
73,873,776	73,873,776	73,873,776	73,873,776	73,873,776	73,873,776
(35,375,000)	(19,076,299)	612,314	24,009,524	51,465,927	83,367,440
38,498,776	54,797,477	74,486,089	97,883,300	125,339,703	157,241,216
102,281,998	92,601,962	81,615,122	69,145,058	54,991,536	38,927,287
-	6,744,150	7,283,682	7,866,377	8,495,687	9,175,342
-	5,432,900	6,562,871	7,799,070	9,152,134	10,633,838
8,528,666	9,680,036	10,986,840	12,470,064	14,153,523	16,064,248
8,528,666	21,857,086	24,833,393	28,135,511	31,801,343	35,873,427
149,309,440	169,256,525	180,934,605	195,163,869	212,132,582	232,041,931
	85,809,440  63,500,000 - 63,500,000  149,309,440  73,873,776 (35,375,000) 38,498,776  102,281,998  8,528,666 8,528,666	85,809,440 80,394,081  - 5,598,000 - 8,899,470 63,500,000 68,580,000 - 5,784,975 63,500,000 88,862,445  149,309,440 169,256,525  73,873,776 73,873,776 (35,375,000) (19,076,299) 38,498,776 54,797,477  102,281,998 92,601,962  - 6,744,150 - 5,432,900 8,528,666 9,680,036 8,528,666 21,857,086	85,809,440       80,394,081       74,978,722         -       5,598,000       6,045,840         -       8,899,470       9,611,428         63,500,000       68,580,000       74,066,400         -       5,784,975       16,232,215         63,500,000       88,862,445       105,955,883         149,309,440       169,256,525       180,934,605         73,873,776       73,873,776       73,873,776         (35,375,000)       (19,076,299)       612,314         38,498,776       54,797,477       74,486,089         102,281,998       92,601,962       81,615,122         -       6,744,150       7,283,682         -       5,432,900       6,562,871         8,528,666       9,680,036       10,986,840         8,528,666       21,857,086       24,833,393	85,809,440       80,394,081       74,978,722       69,563,363         -       5,598,000       6,045,840       6,529,507         -       8,899,470       9,611,428       10,380,342         63,500,000       68,580,000       74,066,400       79,991,712         -       5,784,975       16,232,215       28,698,945         63,500,000       88,862,445       105,955,883       125,600,506         149,309,440       169,256,525       180,934,605       195,163,869         73,873,776       73,873,776       73,873,776       73,873,776         (35,375,000)       (19,076,299)       612,314       24,009,524         38,498,776       54,797,477       74,486,089       97,883,300         102,281,998       92,601,962       81,615,122       69,145,058         -       6,744,150       7,283,682       7,866,377         -       5,432,900       6,562,871       7,799,070         8,528,666       9,680,036       10,986,840       12,470,064         8,528,666       21,857,086       24,833,393       28,135,511	85,809,440       80,394,081       74,978,722       69,563,363       64,148,004         -       5,598,000       6,045,840       6,529,507       7,051,868         -       8,899,470       9,611,428       10,380,342       11,210,769         63,500,000       68,580,000       74,066,400       79,991,712       86,391,049         -       5,784,975       16,232,215       28,698,945       43,330,892         63,500,000       88,862,445       105,955,883       125,600,506       147,984,578         149,309,440       169,256,525       180,934,605       195,163,869       212,132,582         73,873,776       73,873,776       73,873,776       73,873,776       73,873,776         (35,375,000)       (19,076,299)       612,314       24,009,524       51,465,927         38,498,776       54,797,477       74,486,089       97,883,300       125,339,703         102,281,998       92,601,962       81,615,122       69,145,058       54,991,536         -       6,744,150       7,283,682       7,866,377       8,495,687         -       5,432,900       6,562,871       7,799,070       9,152,134         8,528,666       9,680,036       10,986,840       12,470,064       14,153,523

# ANIMAL FATTENING PROJECTED BALANCE SHEET

	Year 6	Year 7	Year 8	Year 9	Year 10
Fixed Assets	53,317,286	47,901,927	42,486,568	37,071,209	31,655,851
<b>Current Assets</b>					
Stocks in trade	8,225,299	8,883,322	9,593,988	10,361,507	11,190,428
Trade debts	13,076,241	14,122,340	15,252,128	16,472,298	17,790,082
Development assets	100,766,520	108,827,841	117,534,068	126,936,794	137,091,737
Cash & bank balances	79,721,427	101,820,966	126,768,565	178,250,353	232,988,067
	201,789,486	233,654,470	269,148,749	332,020,952	399,060,314
Total Assets	255,106,772	281,556,397	311,635,317	369,092,161	430,716,165
Share Capital & Reserves					
Share capital	73,873,776	73,873,776	73,873,776	73,873,776	73,873,776
Retained earnings	120,139,115	162,249,382	210,214,785	264,605,272	323,671,919
	194,012,891	236,123,157	284,088,561	338,479,048	397,545,695
Long term debt	20,694,366	-	-	-	<del>-</del>
Current liabilities					
Creditors/liabilities	9,909,369	10,702,118	11,558,288	12,482,951	13,481,587
Tax payable	12,257,225	14,036,756	15,988,468	18,130,162	19,688,882
Current portion - LT debt	18,232,922	20,694,366			
	40,399,515	45,433,240	27,546,756	30,613,113	33,170,469
Total equity & liabilities	255,106,772	281,556,397	311,635,317	369,092,161	430,716,165

Amount in DVD					
Amount in PKR	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	261,524,823	282,446,809	305,042,553	329,445,958	355,801,634
Costs					
Cost of animals	93,302,333	100,766,520	108,827,841	117,534,068	126,936,794
Feed Cost	85,294,495	92,118,054	99,487,499	107,446,499	116,042,219
Vaccination Cost	6,704,544	7,240,908	7,820,180	8,445,795	9,121,458
Salary costs - management	1,763,194	1,904,249	2,056,589	2,221,116	2,398,806
Salary costs - labor	5,289,581	5,712,748	6,169,767	6,663,349	7,196,417
Repair & maintenance	1,469,328	1,586,874	1,713,824	1,850,930	1,999,005
Electricity cost	3,927,514	4,241,715	4,581,052	4,947,536	5,343,339
Other utilities	436,390	471,302	509,006	549,726	593,704
Depreciation	5,415,359	5,415,359	5,415,359	5,415,359	5,415,359
	203,602,738	219,457,728	236,581,118	255,074,378	275,047,100
Margin	57,922,085	62,989,080	68,461,436	74,371,579	80,754,534
Other costs					
Admin & general expenses	1,469,328	1,586,874	1,713,824	1,850,930	1,999,005
Financial costs	7,423,857	5,255,184	2,793,739	-	-
	8,893,185	6,842,058	4,507,564	1,850,930	1,999,005
Profit before tax	49,028,900	56,147,022	63,953,872	72,520,649	78,755,530
Тах	12,257,225	14,036,756	15,988,468	18,130,162	19,688,882
Profit after tax	36,771,675	42,110,267	47,965,404	54,390,487	59,066,647

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### **Appendix -2 Projected Income Statement**

## ANIMAL FATTENING PROJECTED PROFIT AND LOSS

Amount in PKR

Amount in FRIC	Year 1	Year 2	Year 3	Year 4	Year 5
Revenue	177,989,400	192,228,552	207,606,836	224,215,383	242,152,614
Costs					
Cost of animals	63,500,000	68,580,000	74,066,400	79,991,712	86,391,049
Feed Cost	58,050,000	62,694,000	67,709,520	73,126,282	78,976,384
Vaccination Cost	4,563,000	4,928,040	5,322,283	5,748,066	6,207,911
Salary costs - management	1,200,000	1,296,000	1,399,680	1,511,654	1,632,587
Salary costs - labor	3,600,000	3,888,000	4,199,040	4,534,963	4,897,760
Repair & maintenance	1,000,000	1,080,000	1,166,400	1,259,712	1,360,489
Electricity cost	2,673,000	2,886,840	3,117,787	3,367,210	3,636,587
Other utilities	297,000	320,760	346,421	374,134	404,065
Depreciation	5,415,359	5,415,359	5,415,359	5,415,359	5,415,359
	140,298,359	151,088,999	162,742,890	175,329,093	188,922,191
Margin	37,691,041	41,139,553	44,863,946	48,886,290	53,230,422
Other costs					
Admin & general expenses	1,000,000	1,080,000	1,166,400	1,259,712	1,360,489
Financial costs	14,959,440	13,808,070	12,501,265	11,018,041	9,334,583
	15,959,440	14,888,070	13,667,665	12,277,753	10,695,072
Profit before tax	21,731,601	26,251,483	31,196,281	36,608,537	42,535,351
Tax	5,432,900	6,562,871	7,799,070	9,152,134	10,633,838
Profit after tax	16,298,701	19,688,613	23,397,211	27,456,403	31,901,513

### **Appendix -3 Projected Cash Flow**

## ANIMAL FATTENING PROJECTED CASH FLOW STATEMENT

Amount in PKR

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Duedit hadaya tayati ay		21 721 601	20 251 402	21 100 201	26 600 527	42 525 254
Profit before taxation	-	21,731,601	26,251,483	31,196,281	36,608,537	42,535,351
Adjustment of non-cash items		F 44F 2F2	F 44F 0F0	F 44F 0F0	F 44F 2F2	5 445 250
Depreciation	-	5,415,359	5,415,359	5,415,359	5,415,359	5,415,359
Financial charges	-	14,959,440	13,808,070	12,501,265	11,018,041	9,334,583
	-	42,106,400	45,474,912	49,112,905	53,041,937	57,285,292
Working capital changes						
current assets	-	(19,577,470)	(6,646,198)	(7,177,893)	(7,752,125)	(8,372,295)
current Liabilities		6,744,150	539,532	582,695	629,310	679,655
	-	(12,833,320)	(6,106,666)	(6,595,199)	(7,122,815)	(7,692,640)
_						
	-	29,273,080	39,368,246	42,517,706	45,919,123	49,592,652
Taxes paid	-	-	(5,432,900)	(6,562,871)	(7,799,070)	(9,152,134)
Interest paid	(14,959,440)	(14,959,440)	(13,808,070)	(12,501,265)	(11,018,041)	(9,334,583)
Cash flow from Operations	(14,959,440)	14,313,640	20,127,276	23,453,570	27,102,011	31,105,935
·						
Capital expenditure	(70,850,000)					
Other set-up costs	(98,875,000)					
·	, , ,					
Equity	73,873,776					
Debt	110,810,664	(8,528,666)	(9,680,036)	(10,986,840)	(12,470,064)	(14,153,523)
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Total cash generated	-	5,784,975	10,447,241	12,466,730	14,631,947	16,952,413
Opening cash	-	-	5,784,975	16,232,215	28,698,945	43,330,892
Closing cash	-	5,784,975	16,232,215	28,698,945	43,330,892	60,283,305

## ANIMAL FATTENING PROJECTED CASH FLOW STATEMENT

Amount in PKR

	Year 6	Year 7	Year 8	Year 9	Year 10
Profit before taxation	49,028,900	21,731,601	26,251,483	31,196,281	36,608,537
Adjustment of non-cash items					
Depreciation	5,415,359	5,415,359	5,415,359	5,415,359	5,415,359
Financial charges	7,423,857	14,959,440	13,808,070	12,501,265	11,018,041
	61,868,116	42,106,400	45,474,912	49,112,905	53,041,937
Working capital changes					
current assets	(9,042,078)	(19,577,470)	(6,646,198)	(7,177,893)	(7,752,125)
current Liabilities	734,027	6,744,150	539,532	582,695	629,310
	(8,308,051)	(12,833,320)	(6,106,666)	(6,595,199)	(7,122,815)
	53,560,065	29,273,080	39,368,246	42,517,706	45,919,123
Taxes paid	(10,633,838)	-	(5,432,900)	(6,562,871)	(7,799,070)
Interest paid	(7,423,857)	(14,959,440)	(13,808,070)	(12,501,265)	(11,018,041)
Cash flow from Operations	35,502,370	14,313,640	20,127,276	23,453,570	27,102,011
Capital expenditure					
Other set-up costs					
Equity					
Debt	(16,064,248)	(8,528,666)	(9,680,036)	(10,986,840)	(12,470,064)
	, , , ,	, , , ,	,	, , , ,	
Total cash generated	19,438,122	5,784,975	10,447,241	12,466,730	14,631,947
Opening cash	60,283,305	79,721,427	85,506,401	95,953,642	108,420,372
Closing cash	79,721,427	85,506,401	95,953,642	108,420,372	123,052,319

